

Claims

1. A gel for application to a wound, comprising a mixture of citrus complex carbohydrates, a cellulose derivative, a polyol component and water, wherein said citrus complex carbohydrates are cross-linked to said cellulose derivative by an ionic cross-linking agent.
2. A gel according to claim 1, wherein said cellulose derivative is a carboxymethyl cellulose derivative.
3. A gel according to claims 1 or 2, wherein said cellulose derivative is sodium carboxymethyl cellulose.
4. A gel according to any one of the preceding claims, wherein said polyol component is a dihydroxyalkane having from 2 to 6 carbon atoms.
5. A gel according to claim 4, wherein said dihydroxyalkane is 1,2-dihydroxypropane.
6. A gel according to any one of claims 1 to 3, wherein said polyol component is a polyhydroxyalkane of the general formula
$$C_nH_{(2n+2)}O_n$$
wherein n is an integer of from 3 and 6.
7. A gel according to claim 6, wherein said polyol component is polyethylene glycol.
8. A gel according to claim 7, wherein said polyethylene glycol has a molecular weight in the range of from 200 to 600.
9. A gel according to any one of the preceding claims,

wherein said ionic cross-linking agent is a multivalent ion

10. A gel according to any one of the preceding claims,
5 wherein said ionic cross-linking agent is a divalent ion.
11. A gel according to claim 10, wherein said divalent ion is a magnesium ion.
- 10 12. A gel according to claim 10, wherein said divalent ion is a calcium ion.
13. A gel according to any one of the preceding claims,
15 wherein said citrus complex carbohydrates have been extracted from citrus fruit peel by leaching using an aqueous medium.
14. A gel according to claim 13, wherein said aqueous
20 medium is hot acidified water.
15. A gel according to any one of claims 1 to 14, wherein said citrus complex carbohydrate is a low ester carbohydrate.
- 25 16. A gel according to any one of the preceding claims, wherein said citrus complex carbohydrate comprises from 0.01 to 10% by weight of the gel.
- 30 17. A gel according to claim 16, wherein said citrus complex carbohydrate comprises about 2.8% by weight of the gel.
18. A gel according to any proceeding claim, wherein
35 said cellulose derivative comprises from 0.01% to 10%

by weight of the gel.

19. A gel according to claim 18, wherein said cellulose derivative comprises about 3.7% by weight of the gel.
- 5 20. A gel according to any preceding claim, wherein said polyol component comprises from 0.1 to 30% by weight of the gel.
- 10 21. A gel according to any preceding claim, wherein said polyol comprises about 14.4% by weight of the gel.
22. A gel according to any preceding claim, wherein said ionic cross-linking agent comprises from 0.01 to 5% by weight of the gel.
- 15 23. A gel according to any preceding claim, wherein said ionic cross-linking agent comprises about 0.9% by weight of the gel.
- 20 24. A gel according to any preceding claim, wherein said gel has been sterilised.
- 25 25. A gel according to any preceding claim, wherein said gel further comprises at least one of the following components: an anti-bacterial agent; an anti-fungal agent; an anti-mycotic agent; an anaesthetic; an additional debriding agent; an anti-inflammatory agent; a growth factor; an enzyme; a pharmaceutical composition; vitamins; amino acids; aloe vera or trace metals.
- 30 26. A gel according to any preceding claim, wherein said gel comprises 2.8% by weight citrus complex carbohydrate, 3.7% by weight cellulose derivative,
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14.4% by weight polyol, 0.9 % by weight ionic cross-linking agent and 78.2% by weight water.

27. A process for making a gel, comprising the steps of:
- 5 mixing a citrus complex carbohydrate, a cellulose derivative and an ionic cross-linking agent in aqueous solution to effect formation of ionic bonds between said citrus complex carbohydrate and said cellulose derivatives; and
- 10 adding a polyol to the mixture to form a gel.
28. A process according to claim 27, comprising the steps of:
- preparing a first aqueous solution comprising a
- 15 citrus complex carbohydrate;
- Preparing a second aqueous solution comprising a cellulose derivative;
- preparing a third aqueous solution comprising an ionic cross-linking agent;
- 20 blending said first, second and third solutions to effect formation of ionic bonds between said citrus complex carbohydrate and said cellulose derivatives; and adding a polyol to the blended solutions to form a gel.
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29. A process according to claim 27 or 28, substantially as described in the Example.
30. A process according to any one of claims 27 to 29
- 30 substantially as hereinbefore described.
31. A wound dressing comprising a gel in accordance with any one of claims 1 to 26.
- 35 32. A bacteriostatic gel comprising a mixture (repeat

feature of claim 1).